REMARKS

Claims 1-8, 10-14, 16-18, 20, 22-39, 41-46, and 48-62 will be pending upon entry of the present amendment. Claims 1, 10-14, 16-18, 22, 23, 26-28, 30-33, 36, 38, 39, 41, 42, and 48 are amended, claims 9, 15, 19, 21, and 47 are cancelled, and new claims 54-62 are submitted herewith. No new matter has been added to the application.

A. Rejections Under 35 U.S.C. § 112, First Paragraph

Claims 13, 15, and 21 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to point out and distinctly claim the subject matter which is regarded as the invention. In particular, claims 13 and 15 were indicated as contradicting each other, while claim 21 lacked antecedent basis for "said first thresholds." Applicants respectfully disagree with the Examiner with regard to claims 13 and 15, inasmuch as the original claim 13 was directed to aspects of the invention related to variations greater than a first threshold, while claim 15 was related to aspects related to variations lower than the first threshold. Claim 1 has been amended, in part, to incorporate subject matter of claim 15, and additionally to clarify the scope of the claimed elements. Claim 16 has been amended to incorporate subject matter from claim 21, and the error in antecedence has been corrected.

B. Summary of Rejections Under 35 U.S.C. §§ 102 and 103

Claims 1, 3, 8-12, 16-18, 20, 23-26, 30, 33, 34, 36, and 37 are rejected under 35 U.S.C. §102(b) as being anticipated by Svancarek et al. (U.S. Patent 6,249,274, hereafter Svancarek); claims 42, 44, 46, and 51-53 are rejected under 35 U.S.C. §102(b) as being anticipated by Orchard (U.S. Patent 6,834,249); claims 2 and 4 are rejected under 35 U.S.C. §103(a) as being unpatentable over Svancarek; claims 5, 6, and 35 are rejected under 35 U.S.C. §103(a) as being unpatentable over Svancarek in view of Kuga (U.S. Patent 5,701,131); claim 7 is rejected under 35 U.S.C. §103(a) as being unpatentable over Svancarek and Kuga in view of Davison (U.S. Patent 4,682,159); claims 13, 14, 38-47, and 51-53 are rejected under 35 U.S.C. §103(a) as being unpatentable over Svancarek in view of Orchard; claims 15 and 48-50 are rejected under 35 U.S.C. §103(a) as being unpatentable over Svancarek and Orchard in view of Bartlett

(U.S. Patent 6,773,883), claims 19, 27, and 31 are rejected under 35 U.S.C. §103(a) as being unpatentable over Svancarek in view of Bartlett; and claims 21, 22, 28, 29, and 32 are rejected under 35 U.S.C. §103(a) as being unpatentable over Svancarek and Bartlett in view of Orchard.

Where passages of the references are cited in applicants' comments, they will be indicated by column number and line number(s) separated by a colon. Thus, for example, 3:22 refers to column 3, line 22. Applicant strongly disagrees that the art teaches claim 1 as now presented.

C. Response to Rejections Under 35 U.S.C. §§ 102 and 103

Claim 1 recites, in part, "a microcontroller … configured to generate first control signals correlated to … positions [of a movable body], only while detected movements of said body are less than a first threshold and greater than a second threshold." The art of record fails to teach or suggest this limitation of claim 1. This language is similar to the language of original claim 15, which was rejected as being unpatentable over Svancarek and Orchard, in view of Bartlett. The Examiner relied on the teachings of Bartlett in rejecting claim 15, pointing to 5:35-47 as teaching the second threshold of claim 15. In relevant part, the cited passage states, "Angular orientations of a magnitude within a first angular range … produce slow, stepwise scrolling, to ease selection of a particular letter. Angular orientations of a magnitude within a second angular range … produce continuous scrolling with the rate of scrolling increasing with an increasing magnitude of the angular orientation."

It can be seen that Bartlett's use of angular ranges is merely to control a rate of scrolling. As a user increases the angle, the scrolling rate increases accordingly. Thus, Bartlett does not teach or suggest generating first control signals *only* while detected movements of said body are less than a first threshold and greater than a second threshold, but only changes the rate at which scrolling commands occur, according to the angle. Furthermore, applicants note that, while the control signals of claim 1 are correlated to positions of the body, the determination of whether to generate the control signals is governed by *movement* of the body. In contrast, Bartlett's determination is governed by the angle of its device, without reference to movement. For at least these reasons, the art of record cannot teach or suggest all the limitations of claim 1, which is therefore allowable. Applicant strongly disagrees that the art teaches claim 1 as now presented.

Claim 13 recites "means for generating second control signals upon detecting movements of said device that are greater than said first threshold." The Office Action points to Orchard as teaching or suggesting this limitation, and suggests that it would have been obvious to use Orchard's motion threshold to control functions that Svancarek controls via control buttons. With regard to its motion threshold, Orchard states, at 5:34-37, "motion control agent 114 relies on a motion threshold of the motion detection sensor(s) to *ensure that random movements of the device [do] not result in a motion indication*, thereby affecting the operational state and/or display content of the device." (Emphasis added.) Thus, Orchard teaches disabling or ignoring its motion sensors at levels below its motion threshold, to avoid unintentional operations. Based on these teachings, if one of ordinary skill were to combine Orchard with Svancarek, it would not be for the purpose of replacing buttons in order to control functions, but instead for the purpose of disabling Svancarek's accelerometers below the threshold. Furthermore, combining the references as suggested in the Office Action would require replacing the operations assigned to its accelerometers by Svancarek with those assigned by Orchard, which would render Svancarek unsatisfactory for its intended purpose. See MPEP § 2143.01 (if [a] proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification).

Claim 13 depends from claim 1, which recites "a microcontroller … configured to generate first control signals … only while detected movements of said body are less than a first threshold." Thus, claim 13 is directed to a device that is configured to generate first control signals while detected movements are less than a threshold and second control signals upon detecting movements that are greater than the threshold. These limitations are neither taught nor suggested in any of the art of record. For the reasons outlined above, claim 13 is allowable on its own merits.

As currently presented, claim 16 incorporates language that is similar in scope to language originally found in claims 19 and 21, and recites, in part, comparing … detected movements of [a user controlled] device with a first threshold and sending corresponding function activation signals to an electrical appliance when the detected movements exceed the first threshold; and comparing the detected movements of said device with a second threshold less than the first threshold and sending corresponding control signals to the electrical appliance when the detected movements exceed the second threshold but not the first threshold. These limitations are neither taught nor suggested by Svacarek, Bartlett, or Orchard, individually or in combination. Svancarek does not teach or suggest any threshold; Orchard provides a lower threshold to prevent operations caused by random movements, and Bartlett provides a lower angular *position* threshold for a similar purpose (see Bartlett 5:40-42) and employs increasing angular positions to control a scrolling rate, but does not provide a threshold of any kind beyond which it performs an operation that is different from one performed while below the threshold. Claim 16 is therefore allowable over the cited art.

Claim 23 recites, in part, "means for differentiating between a movement of the body in a given direction intended by a user to control the position of the pointer, and movement of the body in the same direction intended by the user to activate a function."

Claim 30 recites, in part, "producing control signals corresponding to the movement signals, and suitable for moving a pointer on a computer screen, provided the movement of the body does not exceed a first threshold."

Claim 36 recites, in part, "a microprocessor coupled to the MEMS sensor, configured to compare a rate of movement of the pointing device to a threshold and, if the rate of movement of the pointing device does not exceed the threshold, convert the position signals of the MEMS sensor to control signals suitable for controlling position of a pointer on the computer screen."

Claim 42 recites, in part, "a circuit configured to produce a cursor movement command in a first direction, corresponding to a value of the first signal, when the first signal indicates rotation of the body that is lower than a first threshold, and to produce a first function command when the first signal indicates rotation of the body that exceeds the first threshold."

None of the art of record, alone or in any motivated combination, teaches or suggests any of the above quoted limitations of claims 23, 30, 36, or 42. Accordingly, each of these claims is therefore allowable.

Because independent claims 1, 16, 23, 30, 36, and 42 have been shown to be allowable, the rejections of their respective dependent claims are moot, and will not be discussed in detail. Applicants' decision not to argue the allowability of each of the dependent claims is not to be construed as an admission that such claims would not be allowable but for their dependence on allowable base claims, and applicants reserve the right to present such arguments as may become necessary in the future.

D. Newly Added Claims

The matter added to the claims by amendment is fully supported by the specification and drawings as originally filed. For example, support for the amendment to claim 23 can be found in the specification at page 8, lines 20-27 and page 9, lines 13-23; support for new claims 54-56 can be found at page 5, line 14-page 6, line 3; and support for new claims 57-62 may be found at page 9, line 6-page 11, line 2. Applicants submit that new claims 54-62 are allowable over the cited prior art, and therefore request the Examiner to enter and allow the above new claims.

E. Conclusion

In light of the above amendments and remarks, Applicant respectfully submits that all pending claims are allowable. Applicant, therefore, respectfully requests that the Examiner reconsider this application and timely allow all pending claims. The Examiner is encouraged to contact Mr. Bennett by telephone at (206) 694-4848 to discuss the above and any other distinctions between the claims and the applied references. If the Examiner notes any informalities in the claims, he is encouraged to contact Mr. Bennett by telephone to expeditiously correct such informalities.

The Director is authorized to charge any additional fees due by way of this Amendment, or credit any overpayment, to our Deposit Account No. 19-1090.

Respectfully submitted,

SEED Intellectual Property Law Group PLLC

/David V. Carlson/

David V. Carlson
Registration No. 31,153

HHB:wt

701 Fifth Avenue, Suite 5400
Seattle, Washington 98104
Phone: (206) 622-4900
Fax: (206) 682-6031

888398_1.DOC